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11283/3
[1999.003]IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Nigel P. Street et al.

Serial No.: 09/480,844

Filing Date: January 10, 2000

Title: System and Method for Implementing a Flexible Data-Driven Target Object Model

Examiner: B. To

Art Unit: 2172

Address to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450**RECEIVED**

OCT 21 2003

Technology Center 2100

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Date: Oct. 7, 2003Signature: [Signature]
Joseph R. Palmieri, Reg. No. 40760**RESPONSE TRANSMITTAL**

Enclosed please find a Response to the (non-final) Office Action mailed July 7, 2003.

No fee is believed to be required.

Respectfully submitted,

Dated: Oct. 7, 2003[Signature]
Joseph R. Palmieri (Reg. No. 40,760)
136 Turtle Cove Lane
Huntington, NY 11743
631-678-2306Attorney for Applicant
WIND RIVER SYSTEMS, INC.



#15
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10/29/03

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[WRS 1999.003]

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RESPONSE TO OFFICE ACTION

Applicant Wind River Systems, Inc. submits the following in response to the Office Action mailed on July 7, 2003 in the above-identified application. Claims 1-35 remain pending. No new matter has been added.

Applicant thanks the Examiner for including with the Office Action the initialed PTO-1449 form from Applicant's January 31, 2002 Information Disclosure Statement, indicating review of the references cited thereon by the Examiner.

In the Office Action (paragraph 3), the Examiner has rejected claims 1-14 and 31-35 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,539,520 to Tiong et al. (hereinafter “Tiong”) in view of U.S. Patent No. 6,356,933 to Mitchell et al. (hereinafter “Mitchell”). The Examiner has also in the Office Action (paragraph 4) rejected claims 15-30 under 35 U.S.C. § 103(a) as being unpatentable over Tiong. Applicant respectfully requests that the Examiner reconsider the rejections based on the following.

Tiong describes “systems and methods for generating boundary scan configuration files and VERILOG netlists.” (Tiong, col. 1, lines 14-16.) A hardware description generation host (which may be a computer) is connected to a client computing system over a data connection (such as the Internet). The hardware description generation host provides a “website that allows the user to input and receive information utilizing a browser.” (Id., col. 7, lines 26-29.) The website uses “webpages” which may be in any format, “such as HTML, DHTML, XML, etc., suitable for creating and displaying a web page.” (Id., col. 10, lines 4-8.) The user may upload input parameters related to a circuit device for which the user wants HDL code for a boundary scan chain implementation via the webpages, and the hardware description generation host generates an HDL file using the input parameters. (Id., col. 7, lines 4-15.) The hardware description generation host is described as including a CGI “script for generating the HDL files.” (Id., col. 7, lines 38-40.) The scripts “convert[] the input parameters to HDL files.” (Id., col. 7, lines 52-53.)

Mitchell describes a system whereby “the user interface portion of [an] application program can be delivered to the computer user either on the same machine on which the application is executing or on another machine remote from the machine executing the application.” (Mitchell, col. 2, lines 13-17.) An “application independent client process (AICP)” executes on a user workstation, specifically described as a “plug-in” to a web browser. (Id., col. 3, lines 52-55.) The user may send a web page request over the Internet which includes “a request to execute an application program on the web server computer system.” (Id., col. 4, lines 8-11.) An “application independent server process (AISP) . . . receives information contained in this request and responds by executing the desired application program.” (Id., col. 4, lines 11-15.) The AICP interprets a downloaded “description file” and renders a graphical user interface (GUI) on the user computer. (Id., col. 4, lines 35-37.) The “description file” is described as

using XML format and including the GUI layout description and connection information. (Id., col. 5, lines 51-54.)

Tiong and Mitchell, both individually and taken together, lack a significant number of elements recited in claims 1-35. The differences between Tiong, Mitchell and the present invention as recited in claims 1-35 are not surprising, as the system described in Tiong is directed to generating HDL files for integrated circuits, while the system described in Mitchell is directed to delivering a user interface of an application to a machine that is remote from the application. Neither of these references describe retrieving and presenting object data about objects in a target system, particularly using data retrieval programs corresponding to the target system and providing the object data and a presentation format to a client based upon an object description file (as described in the Specification as the preferred embodiment of the present invention).

In contrast to Tiong and Mitchell, claim 1 according to the present invention recites a method (and claim 35 recites a device having a set of instructions) that includes:

- receiving target system information from the target system;
- retrieving a set of object description files corresponding to the target system information;
- sending to a client a set of objects supported based on the set of object description files retrieved;
- receiving a selected object from the client;
- selecting one of the set of object description files corresponding to the selected object;
- retrieving one of a set of data retrieval programs corresponding to the target system information;
- retrieving object data about the selected object using the retrieved one of the set of data retrieval programs;
- decoding the object data about the user selected object using the selected one of the set of object description files corresponding to the selected object to form decoded object data; and
- sending the decoded object data and a presentation format to the client allowing the client to be data driven.

Tiong and Mitchell (either alone or in combination) do not teach or suggest such a method. For example, neither Tiong nor Mitchell describe receiving target system information from the target system. Nor do Tiong and Mitchell teach or suggest retrieving one of a set of data retrieval programs corresponding to the target system information. Nor do Tiong and Mitchell teach or suggest retrieving object data about the selected object using the retrieved one of the set of data

retrieval programs. Nor do Tiong and Mitchell teach or suggest decoding the object data about the user selected object using the selected one of the set of object description files corresponding to the selected object to form decoded object data.

The Examiner in the Office Action has pointed to several portions of Tiong as teaching portions of the method of claim 1. However, Applicant's review of these portions of Tiong noted little correspondence with the elements of claim 1 – for example, no analogs were found in Tiong to target system information from a target system, a selected object from a client, an object description file corresponding to the selected object, or data retrieval programs corresponding to the target system information. Rather, a simple web-based application is described by Tiong that allows for use of a generic CGI and generic CGI scripts to convert user input from a client web browser into an HDL file.

Claim 31 recites a method that includes:

- retrieving object data from the target system for an object selected by a client, the retrieval performed by using one of the set of data retrieval programs corresponding to the target system; and
- providing the object data and a presentation format to the client, the object data and the presentation format based upon one of a set of object description files corresponding to the object selected by the client.

As noted for claims 1 and 35, neither Tiong nor Mitchell teach or suggest all of the elements of claim 31. For example, neither Tiong nor Mitchell teach or suggest providing the object data and a presentation format to the client, the object data and the presentation format based upon one of a set of object description files corresponding to the object selected by the client. The Examiner has noted in the Office Action that Tiong does not teach this element. Mitchell also does not teach this element – Mitchell does not teach or suggest the object data and presentation format based upon one of a set of object description files corresponding to the object selected by the client. Mitchell describes an XML-based description file that includes a GUI layout description and connection information, which is provided to the client in order to establish a connection between AICP and AISP. (Mitchell, col. 5, lines 51-58; col. 6, lines 44-51.) Thereafter, state change data for connected control objects need only be exchanged between the AICP and AISP, and the AICP may thereby update its managed objects. (See *id.*, col. 9, lines 27-37.)

As Applicant believes neither Tiong nor Mitchell (either individually or in combination) teach or suggest all of the elements of claims 1, 31 and 35, Applicant believes claims 1, 31 and 35 to be patentable over Tiong and Mitchell. Since claims 2-14 depend (either directly or indirectly) from claim 1, and claims 32-34 depend (either directly or indirectly) from claim 31, and therefore each of these sets of claims include all of the limitations of claims 1 and 31 (respectively), Applicant believes these claims to be patentable over Tiong and Mitchell as well. Applicant therefore respectfully requests that the Examiner withdraw the rejections of claims 1-14 and 31-35.

Also in contrast to Tiong, claim 15 according to the present invention recites a system that includes:

- a client;
- an object database including a set of object description files and a set of data retrieval programs, the set of object description files including at least one object description file corresponding to an object selected by the client, the set of data retrieval programs including at least one data retrieval program corresponding to the target system;
- an object interface coupled to the client and the object database to retrieve object data from an object in the target system using the at least one data retrieval program corresponding to the target system, and providing the object data to the client based on the at least one object description file corresponding to the object selected by the client; and
- a target interface coupled to the object interface to enable connection of the object interface to the target system.

Tiong does not teach or suggest such a system, as it is missing several elements recited by claim 15. For example, Tiong does not teach or suggest a data retrieval program corresponding to a target system. Nor does Tiong teach or suggest an object interface coupled to the client and the object database to retrieve object data from an object in the target system using the data retrieval program. The Examiner has pointed to the CGI and scripts that use CGI in rejecting claim 15, however none of the CGI scripts described correspond to any target system, nor are they used to retrieve object data from an object in such a target system. Rather, the CGI scripts described in Tiong are "adapted to generate HDL files from input parameters." (Tiong, col. 12, lines 53-54; col. 7, lines 37-40.)

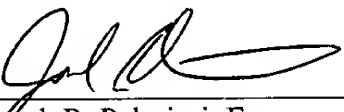
As Applicant believes Tiong does not teach or suggest all of the elements of claim 15, Applicant believes claim 15 to be patentable over Tiong, and respectfully requests that the

Examiner withdraw the rejection of claim 15. As claims 16-30 depend from claim 15, and therefore include all of the limitations of claim 15, Applicant believes these claims to be patentable over Tiong as well, and respectfully requests that the Examiner withdraw the rejections of these claims as well.

In light of the foregoing, claims 1-35 are believed to be in condition for allowance. All issues raised by the Examiner having been addressed, a early and favorable action on the merits is earnestly solicited. Should the Examiner desire further discussion of Applicant's remarks, Applicant (via the undersigned) is available for telephonic interview at the Examiner's convenience.

Respectfully submitted,

Dated: Oct. 7, 2003



Joseph R. Palmieri, Esq.
Reg. No. 40,760
136 Turtle Cove Lane
Huntington, NY 11743
(631) 678-2306

Attorney for Applicant
WIND RIVER SYSTEMS, INC.